## **PUBLIC NOTICE**

**PERMIT APPLICATION:** NRS # 05.001

**APPLICANT:** Babelay Farms, LLC

815 Sunnydale Road Knoxville, Tenn. 37923

615-531-9788

**LOCATION:** Tributary to Murphy Creek, proposed subdivision on McCampbell Road

Knoxville, Knox Co., Tenn. 36.0469 °N, -83.8868 °W

WATERSHED DESCRIPTION: Murphy Creek is part of the First Creek watershed and is listed as not supporting its designated water quality uses (fish and aquatic life, recreation, livestock watering and wildlife, irrigation). The land use for the area is traditionally agricultural, but residential subdivisions are increasing in the area. Of the two watercourses on the property, one was determined to be a wet weather conveyance and the other was determined to be a stream. The portion of the stream on the property is 1153 feet long and the channel varies from 8" to 18" wide and typically 8" deep. Currently the runoff from a neighboring subdivision empties into the upstream segments of the stream on this property. The U.S. Army Corps of Engineers is not exercising jurisdiction on this stream. (Photos of existing stream included on Internet version of this notice at http://www.state.tn.us/environment/wpc/wpcppo/arap/).

**PROJECT DESCRIPTION:** The applicant proposes to build a new residential subdivision that will involve relocating the upstream 578 feet of the existing stream. The relocated channel will terminate at a subdivision road and the water will be piped underground to a set of ponds in the north corner of the property. There is another set of ponds located on the wet weather conveyance on the opposite side of the subdivision. The applicant proposes to mitigate the loss of stream footage by creating a 10' wetland shelf around four proposed pond areas to buffer the quantity and quality of post-construction storm water runoff. A spring located next to the existing stream channel will be piped to the remaining downstream segment of the stream located off the property and empties into Murphy Creek. A wooded area of approximately 20 acres on the south end of the subdivision will be left in its natural state.

PERMIT COORDINATOR: Juliana W. Kyzar

USGS TOPOGRAPHIC QUADRANGLE: Fountain City 146 SW

Babelay Farms, LLC Nrs05.001, page 2

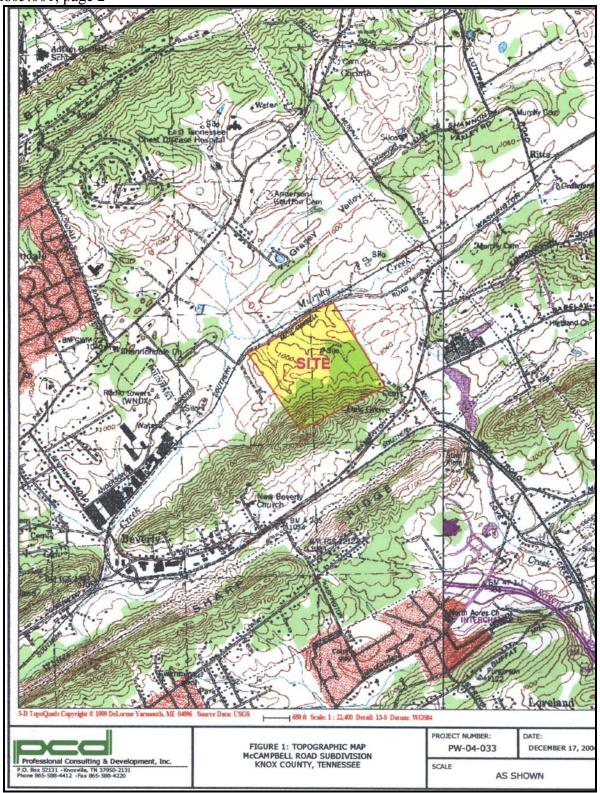


Figure 1: Topographic map showing subdivision site



Figure 2: Aerial photo showing surrounding area with recently developed subdivisions



**Photo 1**: Upstream portion of existing channel, coming out of culvert. This segment will be relocated. Photo by JWK



**Photo 2**: Downstream portion of existing channel exiting property. This segment will be eliminated. Photo by JWK

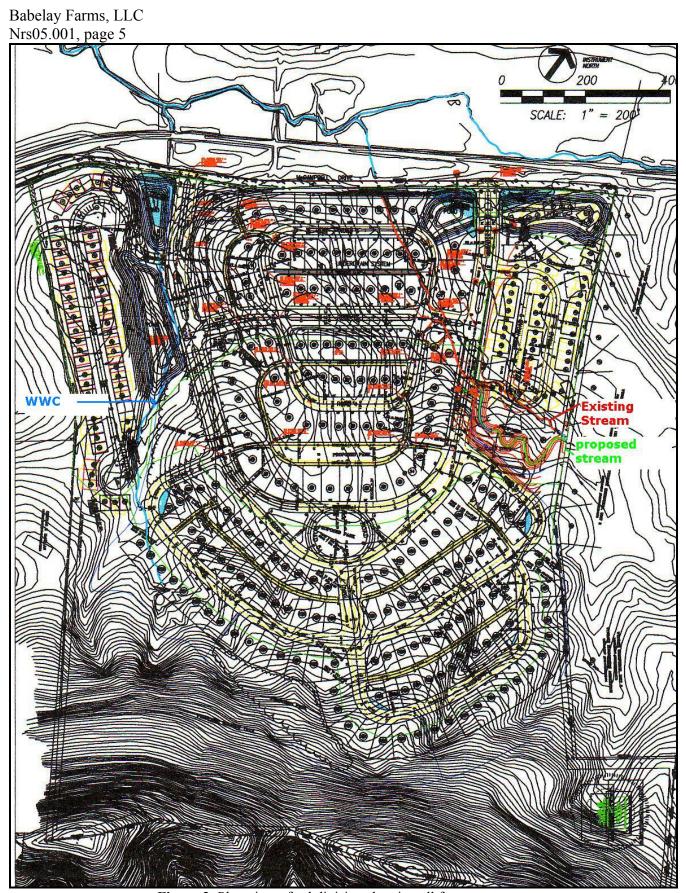


Figure 3: Plan view of subdivision showing all features

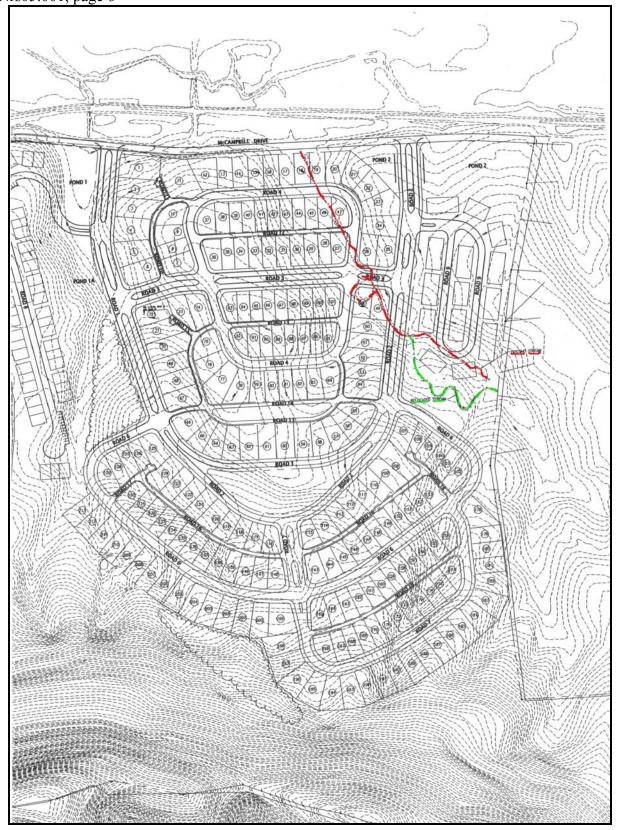


Figure 4: Site plan showing existing stream channel (to be eliminated) and relocated stream channel.

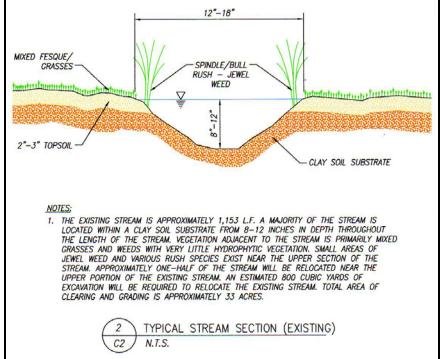


Figure 5: Existing stream profile

PLANT A ROW OF TIRES ALONG
BOTH SIDES OF CREEK © 20' O.C.
WITH 2.5' CALIPER & CHEST HEIGHT.
USE NATIVE TREES; RED MAPLE, PIN
OAK, STCAMORE, ETC.

1" CALIPER WILLOWS
PLANTED ALONG STREAM
EDGE © 50' O.C..
ALTERNATE SIDES OF THE
STREAM.

CLAY SOIL SUBSTRATE

LOW FLOW MEANDERING CHANNEL
(SEE PLAN FOR ALICHMENT).
CONTOUR BOTTOM TO CREATE
RIFFLES & POOLS.

NOTES:

1. THE PROPOSED STREAM IS DESICNED TO MINIC THE EXISTING STREAM RELATIVE TO
LENGTH AND WORLD AND TO ALLOW SUFFICIENT DEADNAGE FOR THE WATERSHED WHICH
MICLUDES RETENTION WATER FROM A NEIGHBORING SUBJOINSION VECETATION
REPLACEMENT WILL BE SAMILAR TO EXISTING VECETATION BUT WILL ALSO INCLUDE NATIVE
TREES SUCH AS RED MANTE SYMMORE, MOR PIN OAK, ADDITIONAL PLANT MATERALLE,
SHRUBS WILL SE PLANTED BETWEEN THE WOODY VECETATION. THE MIXED VECETATION
ALONG THE STREAM MILL AND ESTABLISHING LONG-TERM PROTECTION OF SEASONAL
THE PERATURE EXTREMES DURING PRIMABIL THE STANDER MONTHS. CRITICAL AREAS
SUBJECT TO EROSION MILL BE STREAMED WITH A COMBINATION OF ROCK, EROSION
CONTROL MATTING, AND VECETATION.

3 TYPICAL STREAM RELOCATION / MITIGATION SECTION
ONLY SECTION MILL BE STREAMED WITH A COMBINATION OF ROCK, EROSION
CONTROL MATTING, AND VECETATION.

Figure 6: Relocated stream profile

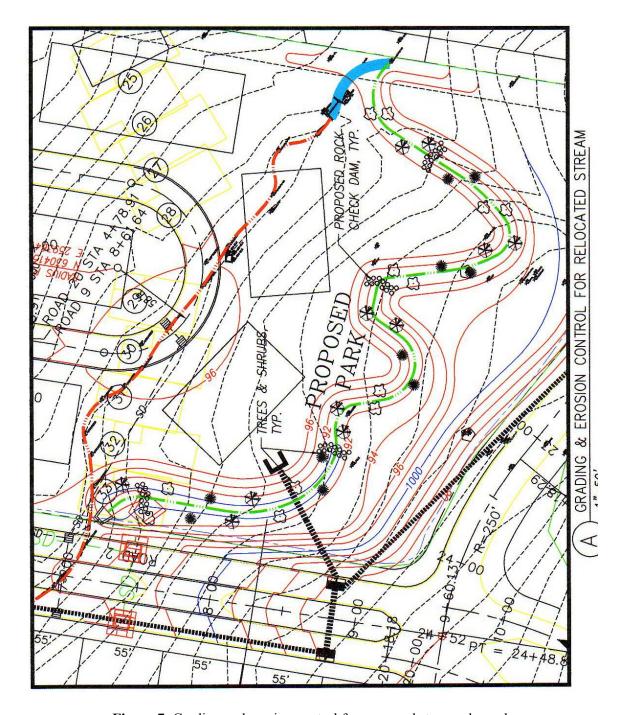


Figure 7: Grading and erosion control for proposed stream channel

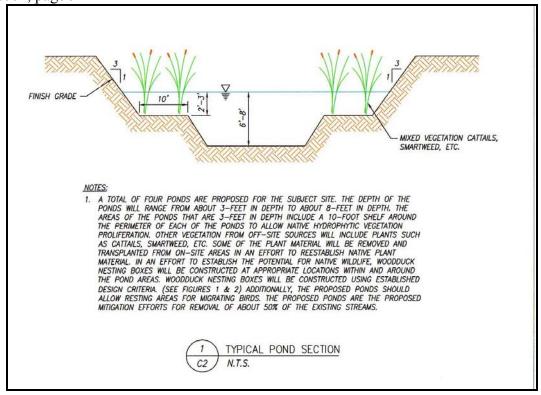


Figure 8: Cross section of proposed pond with wetland shelves (four total pond areas).